Socio-economics and Economic Regeneration
Table of Contents

Section | Page
--- | ---
14 | Socio-economics and Economic Regeneration | 14-1
  14.1 | Introduction | 14-1
  14.2 | Legislation and Policy Framework | 14-2
  14.3 | Methodology | 14-3
  14.4 | Baseline, Future Conditions and Value of Resource | 14-12
  14.5 | Mitigation Measures Adopted as Part of the DCO Scheme | 14-28
  14.6 | Assessment of Effects | 14-28
  14.7 | Mitigation and Residual Effects | 14-39
  14.8 | Cumulative Effects | 14-40
  14.9 | Limitations Encountered in Compiling the PEI Report | 14-41
  14.10 | Summary | 14-42
  14.11 | References | 14-45
  14.12 | Abbreviations | 14-46

Tables
Table 14-1: Summary of relevant NPS NN advice regarding socio-economics and regeneration
Table 14-2: Summary of consultation responses
Table 14-3: Definition of sensitivity
Table 14-4: Definition of magnitude
Table 14-5: Significance of effect assessment matrix
Table 14-6: Definition of significance
Table 14-7: Population and annual growth rates
Table 14-8: Population age structure
Table 14-9: Ethnicity
Table 14-10: Long term health problems or disability
Table 14-11: Proportion of households with no cars or vans, (2011 Census)
Table 14-12: Method of travel to work
Table 14-13: Economic activity by social group
Table 14-14: Unemployment rate by social group
Table 14-15: Qualification levels
Table 14-16: Occupational structure
Table 14-17: Gross weekly earnings (£) comparison
Table 14-18: Approximated social grade
Table 14-19: Residential employment profile
Table 14-20: Workforce employment profile
Table 14-21: Household aggregate deprivation
Table 14-22: Impacts, mitigation and residual impacts for the DCO Scheme on socio-economics

Figures
Figure 14-1: MetroWest Phase 1 Study Area
Figure 14-2: Economic activity rates as a proportion of all usual residents aged 16-74
Figure 14-3: Unemployment rate as a proportion of all usual residents aged 16-74
Figure 14-4: Claimant count rate: 2004-16
Figure 14-5: Employment deprivation Source: IMD, 2015
Figure 14-6: Skills, education and training deprivation
Figure 14-7: Income deprivation

Appendices
See Volume 4 Appendices
Appendix 14.1: Equality Impact Assessment
Appendix 14.2: Health Impact Assessment
CHAPTER 14

Socio-economics and Economic Regeneration

14.1 Introduction

14.1.1 The Portishead Branch Line (MetroWest Phase 1) Development Consent Order Scheme ("the DCO Scheme") has the potential to give rise to significant effects on socio-economics and economic regeneration impacts. This Chapter:

- describes the relevant legal and policy framework which informs the undertaking of the assessment;
- describes the methodology used for the identification and assessment of likely significant socio-economics and economic regeneration effects in this Preliminary Environmental Information Report ("PEI Report");
- describes the socio-economics and economic regeneration baseline having regard to existing information;
- describes the mitigation measures that have been adopted as part of the DCO Scheme;
- identifies and assesses the likely significant effects that could result from the DCO Scheme during the construction, operation and decommissioning phases;
- considers mitigation of likely significant effects and assesses those residual effects that will result;
- considers the cumulative effects of other developments in combination with the DCO Scheme on socio-economics and economic regeneration;
- identifies the limitations encountered in compiling the PEI Report; and
- provides a summary of the residual effects for the mitigated Scheme.

14.1.2 This chapter scopes the impact of the DCO Scheme and the other works for MetroWest Phase 1 on the socio-economic profile of the region and economic regeneration in the study areas for the Development Consent Order ("DCO") Application.

14.1.3 The socio-economics and economic regeneration assessment considers the impacts of the DCO Scheme and wider MetroWest Phase 1 in relation to the following topics:

- demography;
- travel patterns;
- labour market participation;
- socio-economic classification;
- employment profile; and,
- deprivation.

14.1.4 This Chapter should be read in conjunction with Chapter 4 Description of the Proposed Works, the Equality Impact Assessment in Appendix 14.1 and the Health Impact Assessment in Appendix 14.2 of the PEI Report Volume 4 Appendices.
14.2 Legislation and Policy Framework

National Policy

14.2.1 National planning policy, such as the National Policy Statement for National Networks ("NPSNN"), the National Planning Policy Framework ("NPPF") and the White Paper Local Growth: Realising Every Place’s Potential (Department for Business Innovation and Skills, 2010) highlight sustainable economic growth as a key objective. The delivery of transport infrastructure is presented as a key mechanism for achieving this objective. Improving the transport network is highlighted as integral to improving accessibility to jobs and markets for employees, businesses and consumers alike. In particular, the NPSNN sets out the Government’s vision and strategic objectives for the national networks to meet the country's long-term needs, supporting a prosperous and competitive economy and improving overall quality of life, as part of a wider transport system: "this means:

- Networks with the capacity and connectivity and resilience to support the national and local economic activity and facilitate growth and create jobs.
- Networks which support and improve journey quality, reliability and safety.
- Networks which support the delivery of environmental goals and the move to a low carbon economy.
- Networks which join up our communities and link effectively to each other". (Summary of Need, page 9).

14.2.2 Table 14-1 below identifies those policies of direct relevance to this assessment and the location where they are considered in this PEI Report.

<table>
<thead>
<tr>
<th>Table 14-1: Summary of relevant NPSNN advice regarding socio-economics and regeneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of NPS provision</td>
</tr>
<tr>
<td>Para. 2.6. There is a need for development on national networks to support national and local economic growth and regeneration, particularly in the most disadvantaged areas. Improved and new transport links can facilitate economic growth by bringing businesses closer to their workers, their markets and each other. This can help rebalance the economy.</td>
</tr>
</tbody>
</table>

14.2.3 Local planning policy such as the West of England Local Transport Plan 3 and Unlocking Our Potential: The Economic Benefits of Transport Investment in the West of England, identifies road congestion and other transport issues as key constraints on economic growth. At the same time, the policy documents explicitly emphasise the prominent role that rail investment can play in driving economic development. As per national planning policy, local policy emphasises transport infrastructure investment as an enabler of economic development and specifically discusses MetroWest Phase 1, including reopening the Portishead Branch Line, as projects that could assist with economic growth.

Local Policy

14.2.4 Although the majority of the DCO Scheme is in North Somerset, a small section falls within Bristol City Council boundaries. Therefore, local planning policy from both local authorities is considered. An overview of the local planning policies in the study area is presented in Chapter 6 Planning Framework. The following key policies pertaining to socio-economic
development and regeneration – within the context of the MetroWest Phase 1 Scheme – have been identified within the North Somerset District Council’s (“NSDC”) and Bristol City Council’s (“BCC”) Core Strategies:

• Policy CS1 – Addressing climate change and carbon reduction (NSDC),
• Policy CS10 – Transportation and movement (NSDC),
• Policy CS20 – Supporting a successful economy (NSDC),
• Policy CS31 – Clevedon, Nailsea and Portishead (NSDC),
• Policy CS32 – Service Villages (NSDC),
• Policy BCS8 – Delivering a thriving economy (BCC), and
• Policy BCS10 – Transport and access improvements (BCC).

14.2.5 Further, North Somerset District Council has prepared An Economic Plan - 2017-2036 to refresh the Council’s position on economic development and growth. Instead of explicitly listing statutory policies that must be adhered to from an economic development perspective, the Plan provides a framework to guide and influence activity, resources and investment. This framework specifies four key investment themes which will contribute to five strategic objectives to achieve the overarching ambition to create “a vibrant and successful place to live, work and study, with a distinct identity and quality of life that attracts and retains enterprise, investment, young people and visitors”.

14.2.6 More detail on the key investment themes and strategic objectives is provided in Chapter 6 Planning Framework, but the key issues pertaining to socio-economic development and regeneration are:

• Theme 1: Facilities and infrastructure
• Theme 3: Competitive businesses and enterprise
• Strategic Objective 1: To create the conditions for higher value local employment
• Strategic Objective 2: To grow and enhance the competitiveness of our business base
• Strategic Objective 3: To foster a culture of enterprise, innovation and aspiration.

14.3 Methodology

Guidance and Best Practice

14.3.1 Although there is no standard guidance for undertaking the socio-economic element of an EIA, the methodology employed for this assessment will follow the wider guidance frameworks set by the following documentation:

• The Green Book: Appraisal and Evaluation in Central Government (HM Treasury, 2003);
• Evaluation Group on Regional and Urban Programmes (EGRUP) and subsequent The 3R’s Guidance (Office of the Deputy Prime Minister, 2004);
• Measuring the Economic Impact of an Intervention or Investment (Office for National Statistics, 2010);
• Guidance for Using Additionality Benchmarks in Appraisal (Department for Business, Innovation and Skills (“BIS”), 2009);
• Statutory Guidance on Local Economic Assessments (CLG, 2010).
Consultations

14.3.2 A summary of consultations undertaken to date is presented in Table 14-2 below. Further information on the consultation process is presented in Chapter 5 Approach to the Environmental Statement and the Consultation Report on the informal stakeholder consultations undertaken in 2015 and subsequent micro-consultation reports are available at http://travelwest.info/project/metrowest-phase-1.

Table 14-2: Summary of consultation responses

<table>
<thead>
<tr>
<th>Organisation and date</th>
<th>Summary of response</th>
<th>Consideration within PEI Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scoping Opinion Responses (August 2015)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning Inspectorate</td>
<td>Paragraph 3.82. The assessment methodology should be agreed with relevant consultees and fully described and justified.</td>
<td>The assessment methodology is fully described in Section 14.3. It adopts the source-pathway-receptor approach recommended by The Planning Inspectorate.</td>
</tr>
<tr>
<td></td>
<td>Potential impacts should be quantified where possible. Where a qualitative judgement is relied upon, this should be supported with robust evidence, including potential indirect impacts. The likely significance of potential effects should be considered in a local and regional context.</td>
<td>The impact assessment is presented in Section 14.6. This includes a robust assessment in accordance with the scoping opinion.</td>
</tr>
<tr>
<td></td>
<td>Paragraph 3.84. MetroWest Phase 1 will route through the West of England sub-region and is likely to have impacts in this region. Described the source-pathway-receptor chain for each potential impact and the criteria used to determine significance.</td>
<td>The source-pathway-receptor approach has been adopted in Section 14.6.</td>
</tr>
<tr>
<td></td>
<td>Paragraph 3.85. The potential positive cumulative impacts should be quantified where possible.</td>
<td>The positive impacts are included in the assessment in Section 14.6 and Table 14.22.</td>
</tr>
<tr>
<td>North Somerset Council</td>
<td>Provision of socio-economic datasets.</td>
<td>Used to validate/verify socio-economic datasets are sourced from ONS and presented in Section 14.4.</td>
</tr>
<tr>
<td>West of England Local Enterprise Partnership (“LEP”)/North Somerset Council</td>
<td>Request for consistency with recently submitted MetroWest Phase 1 Business Cases.</td>
<td>The assessment of construction stage impacts is aligned to the MetroWest Phase 1 Business Case, which is based on the West of England LEP’s Impact Guidance Note on Infrastructure Projects. The impact assessment is presented in Section 14.6. Operational stage impacts are still in development in the Business Case process, therefore reference is made to the West of England LEP’s Strategic Economic Plan to quantify wider economic impacts.</td>
</tr>
</tbody>
</table>
This assessment has been influenced by a range of responses sourced from stakeholders as part of the scoping and baseline study responses and separately from these processes. The key advice and guidance provided during the consultation process includes:

- Potential impacts should be quantified where possible
- Potential effects should be considered at regional and local context where appropriate
- Adoption of the source-pathway-receptor chain impact identification framework
- Expansion of the local study area for Pill to encompass the wards of Pill and Easton-in-Gordano, on the basis that these two villages (and Ham Green) are effectively the same settlement.
- Recognition of the DCO Scheme’s impact on deprived communities located in proximity to the DCO Scheme and elsewhere across the West of England (e.g. Lawrence Hill, Bedminster, and Windmill Hill in Bristol).

**Definition of the Study Area**

This assessment encompasses a number of local and wider study areas to ensure that the full range of potential socio-economic effects are captured and considered within local and regional contexts. In terms of the local study areas, the assessment primarily focusses on the towns of Portishead and Pill. For the purpose of the baseline analysis, the town of Portishead is defined as Portishead built-up-area or the six wards which make up the town (Central, Coast, East, Redcliffe Bay, South and North Weston and West). The town of Pill is defined as the wards of Pill and Easton-in-Gordano, given that these wards cover the three settlements of Pill, Easton-in-Gordano and Ham Green which are contiguous and share similar characteristics. Presenting data for Portishead is appropriate because the DCO Scheme will provide a new link between the town and the rest of the sub-region, via delivery of Portishead station. Socio-economic conditions in Pill and Easton-in-Gordano are also presented, as the Portbury Freight Line forms a key part of the proposals, linking Pill junction and Parson Street Junction and encompassing redevelopment of the station at Pill.

The wider study area for the assessment is defined as the West of England sub-region, comprising the four local authorities of North Somerset, City of Bristol, Bath and North East Somerset and South Gloucestershire. This sub-regional spatial coverage is deemed appropriate given the routing of the wider MetroWest proposals throughout all of the West of England authorities and the likelihood that MetroWest Phase 1 could impact on socio-economic conditions across the entire sub-region. In addition, this wider coverage ensures that deprived communities in the West of England (e.g. Lawrence Hill) are also considered within the assessment.

Within this context, Figure 14-1 below presents the study area for the assessment.
Figure 14-1: MetroWest Phase 1 Study Area
Key Receptors

14.3.7 The DCO Scheme could impact on various socio-economic receptors:

- local residents: the existing populace of the study area;
- local labour market: the working age population of the study area that are economically active;
- Local employees: the working age population of the study area that are economically active and currently employed;
- Local businesses in the defined context areas:
  - Directly affected businesses that must relocate or close in response to the scheme (e.g. those currently accommodated at Station House in Pill – JNC Consulting and Cambridge Weight Plan Place); and,
  - Indirectly affected businesses that may be impacted by changes to accessibility/connectivity as a result of the scheme.

14.3.8 The route through which the DCO Scheme will impact on these receptors is identified via utilisation of the source-pathway-receptor framework (as per the Secretary of State’s advice contained in the Scoping Opinion). This framework provides a mechanism for identifying socio-economic receptors and recognising the potential impacts on these receptors that may arise as a result of the DCO Scheme. The source-pathway-receptor chain can be understood in the following terms:

- Source: an activity from which a potential impact may originate. In the context of MetroWest Phase 1, the actual construction, delivery and operation of the transport infrastructure scheme is the source of potential impacts.
- Pathway: the route through which a source activity may impact on a receptor. This outlines the potential impact of a source activity on a receptor (e.g. creation of new construction jobs to fulfil construction activity).
- Receptor: the socio-economic element or feature which is impacted (e.g. the local labour market).
- Consequence: this is the subsequent effect of the impact of the socio-economic receptor (e.g. reduced unemployment or increased economic activity).

Defining the Baseline

14.3.9 This section is based on data available in the public domain from a range of sources, comprising:

- Census 2011 and 2001 statistics,
- the Business Register and Employment Survey ("BRES") (2015),
- the Annual Survey of Hours and Earnings ("ASHE") (2015),
- the Claimant Count Register (2015),
- Indices of Multiple Deprivation ("IMD") (2015); and
- NOMIS (previously referred to as the National Online Manpower Information System).

14.3.10 The data available from these sources are reasonably up-to-date, typically providing estimates for a range of years between 2011 and 2015. Datasets relating to BRES, ASHE, claimant count register and IMD have all been superseded since the baseline study was originally prepared in 2014. To present a current analysis of baseline conditions, these datasets have been updated in the PEIR Report. Demographic information has also been obtained through consultation with the Senior Research and Monitoring Officer at NSDC.
It is considered that these datasets provide sufficient information on the key indicators that shape the prevailing socioeconomic profile of the study area.

**Assessment of Construction Impacts**

14.3.11 The West of England LEP’s *Impact Guidance Note on Infrastructure Projects* has been utilised to forecast construction stage impacts. This Note provides guidance on best practice benchmarks that convert construction expenditure or turnover into direct and indirect construction jobs, as well as direct and indirect Gross Value Added (“GVA”) uplift.

**Assessment of Operational Impacts**

14.3.12 The Preliminary Business Case for MetroWest Phase 1 was used to assess the direct employment creation and transport economic outcomes of the operational stage.

14.3.13 The Preliminary Business Case contained minimal information on wider economic impacts. An approach to measuring wider economic impacts is specified in the West of England LEP’s Guidance Note. However, this is subject to change following recent Department for Transport guidance. Therefore, for the purpose of the PEI Report, wider economic impacts are reported in line with the West of England LEP’s Strategic Economic Plan.

**Assessment of Decommissioning Impacts**

14.3.14 No specific plans have been formulated for the decommissioning phase of the Portishead Branch Line. It is expected that the services will continue for as long as there is a business case for doing so. Closure of railways is a regulated process, overseen by the Office of Rail and Road. Disposal of railway assets is also regulated by the Office of Rail and Road under the terms of Network Rail’s licence.

14.3.15 Railways are not designed to be decommissioned, although in accordance with paragraph 5.85 of the NPSNN, development plan policies [and Network Rail’s Sustainable Development Strategy], consideration will be given to the sustainability of materials used in construction, including their embodied carbon content, where choice is available and some information on this is provided in Chapter 12 Materials and Waste. For the NSIP, in the event that the train operating company decides to cease services on the Portishead Branch Line, it is likely that the railway assets will remain in place, as occurred after traffic ceased in the 1980s. Previous practice following railway closures suggests that the railway formation will remain available either for re-development over time or finding an alternative transport use such as a guided busway or a cycle path. Such proposals would be subject to their own assessment including consideration of environmental effects. As such proposals are not reasonably foreseeable, the likely impacts cannot be assessed.

14.3.16 For any abandoned part of the railway track bed, vegetation would gradually encroach upon the railway line, with herbaceous plants, shrubs and trees gradually recolonising the railway corridor. The assets comprising the trackbed would gradually fall into disrepair due to the action of erosion and corrosion from rain, plants and animals. As the railway to be authorised by the DCO is largely laid at surface level between Portishead and Pill it is not anticipated that there would be significant need for ongoing maintenance work for embankments or cuttings. Ongoing maintenance of the cuttings and embankments would still be required along the operational railway from the Port to the main line. Network Rail would probably recover (and ideally re-use) items of values such as wiring, signalling equipment and principal supply points (“PSP”).

14.3.17 Remaining assets such as fencing would continue to be maintained. The bridges carrying highways over the DCO scheme and public rights of way would continue to be maintained.
to standards appropriate for the public use, as a result of the obligations of North Somerset District Council as local highway authority.

14.3.18 It is anticipated the line between Royal Portbury Dock and Parson Street would remain open for services to the Port. The currently operational railway would remain open for freight traffic even if passenger services ceased and any decision regarding the cessation of freight services would be one for the Freight Operating Companies and Bristol Port Company, so decommissioning the operational railway is not considered relevant or foreseeable for assessing the DCO Scheme. Were any decommissioning of all or part of the operational railway to be proposed in the future, a separate project would be developed, which would be accompanied by a specific assessment of the implications for the SAC.

14.3.19 It is not anticipated that the associated development comprising highway works or car parks at Portishead would be altered as a result of the cessation of rail passenger services between Portishead and Bristol. Similarly it is anticipated the car parks at Pill would remain as car parks albeit for all of the car parks development proposals might come forward over time and would be assessed for their planning impacts and any environmental effects at such time as such schemes came forward for the local planning authority to consider. Changes to the UK’s use of fuel for transport mean that the nature of emissions from vehicles undertaking any removal of items could only be a matter of speculation.

Assessment of Cumulative Effects

14.3.20 The socio-economic and regeneration effects of the DCO Scheme in combination with other projects, were considered. The other projects were identified following the guidance provided by The Planning Inspectorate’s advice note 17 Cumulative Effects Assessment. This approach is explained in Chapter 18 and a long list of possible projects to be considered is provided in Appendix 18.1 in the PEI Report Volume 4 Appendices and a short list of other projects to be considered in the cumulative effects assessment is provided in Appendix 18.2. Potential impacts are identified and measured based on professional judgement.

Use of Significance Criteria

Value or Sensitivity of the Resource

14.3.21 There is no formal or standardised methodology established for assessing the significance of socio-economic impacts. Therefore, the standard approach in the Department of Transport’s Design Manual for Roads and bridges (“DMRB”) to assessment has been used to inform this assessment. Although DMRB was developed for highways, the Department for Transport considers it is suitable for other linear schemes (Department for Transport, 2015).

14.3.22 The assessment of impacts resulting from MetroWest Phase 1 are underpinned by an evaluation of the value or importance of a resource and the sensitivity of the receptors to change. The range of qualitative rankings associated with sensitivity are indicated in Table 14-3.
### Table 14-3: Definition of sensitivity

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>Typical Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High importance and rarity, highly sensitive to change, limited potential for substitution.</td>
</tr>
<tr>
<td>Medium</td>
<td>High or medium importance and rarity, high or medium sensitivity to change, limited potential for substitution</td>
</tr>
<tr>
<td>Low</td>
<td>Low or medium importance and rarity, low or medium sensitivity to change.</td>
</tr>
<tr>
<td>Negligible</td>
<td>Very low importance and rarity, very low sensitivity to change.</td>
</tr>
</tbody>
</table>

### Magnitude of Impact

14.3.23 Assessment of the magnitude of the impact of the proposals on the socio-economic receptor considers scale and size of impacts, as well as whether impacts are likely to be adverse or beneficial. The magnitude of impacts resulting from MetroWest Phase 1 is assessed using a qualitative scale as illustrated below in Table 14-4.

### Table 14-4: Definition of magnitude

<table>
<thead>
<tr>
<th>Magnitude</th>
<th>Typical Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (Adverse).</td>
</tr>
<tr>
<td></td>
<td>Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality (Beneficial).</td>
</tr>
<tr>
<td>Medium</td>
<td>Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements (Adverse).</td>
</tr>
<tr>
<td></td>
<td>Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality (Beneficial).</td>
</tr>
<tr>
<td>Low</td>
<td>Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements (Adverse).</td>
</tr>
<tr>
<td></td>
<td>Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring (Beneficial).</td>
</tr>
<tr>
<td>Negligible</td>
<td>Very minor loss or detrimental alteration to one or more characteristics, features or elements (Adverse).</td>
</tr>
<tr>
<td></td>
<td>Very minor benefit to or positive addition of one or more characteristics, features or elements (Beneficial).</td>
</tr>
</tbody>
</table>
14.3.24 Effect is the term used to express the consequence of an impact, and is expressed in terms of significance of effect. The significance of effect is determined by correlating the sensitivity of the receptor (Table 14-3) with the magnitude of the impact (Table 14-4). This is achieved using the matrix presented below in Table 14-5.

**Table 14-5: Significance of effect assessment matrix**

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>Negligible</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligible</td>
<td>Neutral</td>
<td>Neutral or minor</td>
<td>Neutral or minor</td>
<td>Minor</td>
</tr>
<tr>
<td>Low</td>
<td>Neutral or minor</td>
<td>Neutral or minor</td>
<td>Minor</td>
<td>Minor or moderate</td>
</tr>
<tr>
<td>Medium</td>
<td>Neutral or minor</td>
<td>Minor</td>
<td>Moderate</td>
<td>Moderate or major</td>
</tr>
<tr>
<td>High</td>
<td>Minor</td>
<td>Minor or moderate</td>
<td>Moderate or major</td>
<td>Major</td>
</tr>
</tbody>
</table>

14.3.25 Both sensitivity and magnitude are taken into account in determining the significance of effect. The different significance levels are described in Table 14-6 below, and are derived from the best practice guidance contained within the Design Manual for Roads and Bridges Volume 11, Section 2, Part 5: HA 205/08 Assessment and Management of Environmental Effect.

**Table 14-6: Definition of significance**

<table>
<thead>
<tr>
<th>Significance Category</th>
<th>Typical criteria descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>These beneficial or adverse effects are considered to be very important considerations and are likely to be material in the decision-making process.</td>
</tr>
<tr>
<td>Moderate</td>
<td>These beneficial or adverse effects may be important, but are not likely to be key decision-making factors. The cumulative effects of such issues may become a decision-making issue if leading to an increase in the overall adverse effect on a particular resource or receptor.</td>
</tr>
<tr>
<td>Minor</td>
<td>These beneficial or adverse effects may be raised as local issues. They are unlikely to be critical in the decision-making process, but are important in enhancing the subsequent design of the DCO Scheme.</td>
</tr>
<tr>
<td>Neutral</td>
<td>No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.</td>
</tr>
</tbody>
</table>

14.3.26 For the purpose of this assessment, socio-economic effects that are categorised as moderate or above are considered significant in terms of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the “EIA Regulations”). Effects may be adverse or beneficial. Where these significant effects are expected to be negative
in nature as well, this would trigger design changes or mitigation measures to be implemented.

14.4 Baseline, Future Conditions and Value of Resource

14.4.1 This section provides commentary on the socio-economic indicators for the towns of Portishead and Pill, which are at the heart of the DCO Scheme. Further, the main routes for MetroWest Phase 1 (Portishead-Bristol, Bristol-Severn Beach, and Bristol-Bath) will link to other areas in the West of England sub-region. As such, the key socio-economic indicators for the West of England are presented with some comparison against equivalent indicators in the towns of Portishead and Pill and national averages.

Socio-Economic, Equality and Health Indicators

Demography

14.4.2 The 2011 Census reveals that there were 24,000 residents in the town of Portishead and 6,200 in Pill in 2011. Since 2001, the population of Portishead grew by 6,500, reflecting an annual growth rate of 3.30%. Rapid population growth in Portishead is attributed to development of the former docks into a vibrant community, combined with residential development elsewhere. This level of growth has continued more recently, with around 25% of all residential units delivered in North Somerset being located in Portishead according to North Somerset’s Annual Monitoring Report (2015). In contrast, the population of Pill marginally declined at an annual growth rate of -0.2% between the Census periods.

14.4.3 The 2011 Census reveals that there were 1.1 million residents across the West of England in 2011 (see Table 14-7). Since 2001, the annual growth rate of population was around 0.84% for the West of England; above the national (0.76%) and Pill (-0.2%) benchmarks, but below the equivalent rate for Portishead (3.3%). The Census data reveal a large and growing market for rail transport (particularly in Portishead), measured purely in terms of population.

<table>
<thead>
<tr>
<th>Geography</th>
<th>Population 2001</th>
<th>Population 2011</th>
<th>Overall Growth</th>
<th>Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pill</td>
<td>6,324</td>
<td>6,180</td>
<td>-2.3%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Portishead</td>
<td>17,121</td>
<td>23,699</td>
<td>38%</td>
<td>3.30%</td>
</tr>
<tr>
<td>West of England</td>
<td>983,856</td>
<td>1,069,583</td>
<td>9%</td>
<td>0.84%</td>
</tr>
<tr>
<td>England</td>
<td>49,138,831</td>
<td>53,012,456</td>
<td>8%</td>
<td>0.76%</td>
</tr>
</tbody>
</table>

Source: 2001 and 2011 Census

Age Structure

14.4.4 In Portishead, the age structure is skewed towards certain vulnerable groups (in particular, young people and elderly; both forming 19% of the total population). Elderly residents are particularly over-represented in Pill, forming 24% of the population. In Portishead, the future working age population is likely to increase considerably given the current high proportion of young people.

14.4.5 The 2011 Census also indicates that the modal age bands differ between the West of England and nationally (see Table 14-8). For example, the West of England has a marginally higher proportion of residents concentrated in the ‘working-age’ bands (i.e.
66% aged 16-64) relative to England as a whole (65%). These findings suggest that a considerable proportion of residents in the West of England are currently at working age, and are therefore likely to be economically active and commute to work.

Table 14-8: Population age structure

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15</td>
<td>16.7%</td>
<td>19.4%</td>
<td>18.2%</td>
<td>18.9%</td>
</tr>
<tr>
<td>16-64</td>
<td>59.4%</td>
<td>61.4%</td>
<td>65.5%</td>
<td>64.8%</td>
</tr>
<tr>
<td>64+</td>
<td>23.9%</td>
<td>19.2%</td>
<td>16.3%</td>
<td>16.3%</td>
</tr>
</tbody>
</table>

Source: 2011 Census

Ethnicity

14.4.6 The vast majority of residents in Portishead and Pill belong to the white ethnic group (97%) according to the latest Census. Around 1% belong to Asian or mixed ethnic groups and less than 1% belong to black or other ethnic groups. The West of England is more ethnically diverse than these towns, but less ethnically diverse than England as a whole (see Table 14-9), with around 9% of residents belonging to ethnic minority groups compared to a national average of 15%.

Table 14-9: Ethnicity

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>97.3%</td>
<td>97.4%</td>
<td>90.9%</td>
<td>85.4%</td>
</tr>
<tr>
<td>Mixed/multiple ethnic groups</td>
<td>1.1%</td>
<td>1.1%</td>
<td>2.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Asian/Asian British</td>
<td>1.1%</td>
<td>1.1%</td>
<td>3.5%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Black/African/Caribbean/Black British</td>
<td>0.2%</td>
<td>0.2%</td>
<td>2.8%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Other ethnic group</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.5%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Source: 2011 Census

14.4.7 Although minority ethnic groups form a relatively small proportion of the population in the West of England, members of ethnic minority groups are considerably less likely to own a private car relative to the white population. The 2011 Census shows that 14% of white residents in the West of England do not have access to a car rising to 26% for mixed ethnic group residents and 39% for black residents. This implies that minority ethnic groups must be more reliant on public transport provision to access jobs and services. At present, these minority groups are disadvantaged in terms of transport options, as the main transportation out of Pill and Portishead is currently by car. As these groups do not have access to a car, this limits their employment opportunities, leading to reliance on bus services.
Disability

14.4.8 In terms of disability, Portishead has a low proportion of residents for whom day to day activities are limited a lot (6.1%) or to some extent (8.6%), relative to England (8.3% and 9.3% respectively). Nevertheless, these figures still mean that around 15% of the Portishead population experience some degree of difficulty in their day to day activities. Residents in Pill are more likely than the national average to suffer from long term health problems or disabilities (with one-fifth of residents limited to some extent). This could relate to the age structure of the town, which is skewed towards elderly residents.

14.4.9 Residents in the West of England are less likely to suffer long term health problems or disabilities relative to the national average, and their day-to-day activities are less limited than in England overall, as shown in Table 14-10 (although only by approximately 1% of the population).

Table 14-10: Long term health problems or disability

<table>
<thead>
<tr>
<th>Geography</th>
<th>Day-to-day activities limited a lot</th>
<th>Day-to-day activities limited a little</th>
<th>Day-to-day activities not limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pill</td>
<td>8.4%</td>
<td>10.2%</td>
<td>81.4%</td>
</tr>
<tr>
<td>Portishead</td>
<td>6.1%</td>
<td>8.6%</td>
<td>85.3%</td>
</tr>
<tr>
<td>West of England</td>
<td>7.7%</td>
<td>9.1%</td>
<td>83.2%</td>
</tr>
<tr>
<td>England</td>
<td>8.3%</td>
<td>9.3%</td>
<td>82.4%</td>
</tr>
</tbody>
</table>

Source: 2011 Census

14.4.10 At the sub-regional level, these findings are supported by analysis of benefit claimants in the context area relative to the national average. Department for Work and Pensions data (May 2013) indicate that 4.7% of the West of England’s population is entitled to disability living allowance. This is marginally below the England average at 5.1%. Nevertheless, the local level data for Pill demonstrates that there are pockets of vulnerable residents located in proximity to MetroWest.

Summary

14.4.11 The synergies between demographic profile and MetroWest are emphasised in the key findings outlined below:

- The study area is home to a growing population in general, increasing the potential market catchment for any transport infrastructure;
- Across the context area, there are regions with an estimated high proportion of working age residents both currently and in the future - these residents will benefit from an alternative mode of travel for commuting;
- At the same time, residents in Pill are typically more elderly than in comparator areas and the DCO Scheme will reduce severance for this vulnerable group;
- The study area is generally home to a lower than average proportion of residents with long term health problems and disabilities. However, this trend does not apply to all communities (e.g. Pill), whose residents are less mobile and might benefit from greater accessibility offered by MetroWest; and
- The ethnic minorities who reside in the study area will not be discriminated against for not having access to a car.
Travel Patterns

Car Ownership

14.4.12 The 2011 Census data show that there are high levels of car ownership in the West of England with around eight out of ten households owning a private car or van (Table 14-11). A very high rate of car ownership is also reported in Portishead and Pill, with nearly nine out of ten households owning a private car or van. In contrast, around a quarter of households across England do not own a car or van. This suggests an over-reliance on private car ownership in the wider context area, which could be reduced through the provision of an improved public transport network, leading to socio-economic, health, equality and environmental benefits.

<table>
<thead>
<tr>
<th>Cars</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of households with no car</td>
<td>11.9%</td>
<td>11.6%</td>
<td>21.7%</td>
<td>25.8%</td>
</tr>
</tbody>
</table>

Source: 2011 Census

Method of Travel to Work

14.4.13 The West of England is a relatively self-contained travel to work area, with 90% of residents also working within the sub-region. Further, two-thirds of all residents who both live and work in the West of England travel to work using motor vehicles. This suggests a high reliance on private car ownership despite a high rate of containment within the sub-region. This points towards a lack of attractive alternative transport modes for commuting trips.

14.4.14 That said, considering work journeys to all destinations, the proportion of commuters travelling to work via private car in the West of England (69%) is higher than the nationwide average (66%) but lower than for Portishead and Pill (81% and 86% respectively) (Table 14-12). Therefore alternative modes of commuting must be available across parts of the West of England, which are not available in Portishead and Pill. For example, 2.3% of commuters in the West of England travel to work by train; in the absence of rail infrastructure this proportion falls to less than 1% for commuters in Portishead and Pill. In comparison, the mode share for buses is between 3% and 4% in these towns.

<table>
<thead>
<tr>
<th>Method of Travel to Work</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train</td>
<td>0.8%</td>
<td>0.8%</td>
<td>2.3%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Motor Vehicle</td>
<td>80.5%</td>
<td>85.5%</td>
<td>69.2%</td>
<td>66.4%</td>
</tr>
</tbody>
</table>

Source: 2011 Census

Labour Market Participation

Economic Activity and Unemployment

14.4.15 Economic activity rates provide a proxy for the labour market participation of the working age population in an area. Economic activity in the study area is at least in line with the national average of 70% (e.g. Pill), with rates in Portishead being particularly high (75%) —
see Figure 14-2 below. This implies that the study area is home to a high proportion of residents who are in employment or actively seeking employment.

14.4.16 However, the relatively high rates of economic activity are not achieved by all social groups in the West of England. For example, most ethnic minority groups are less likely to be economically active relative to the total population of the West of England, as highlighted in Table 14-13. In addition, the data suggest that ethnic minority groups in the West of England tend to be less economically active compared to ethnic minority groups nationally as well. This trend is not specific to the West of England; it reflects a national trend which results from a lower rate of female labour market participation amongst some ethnic minority communities.

Figure 14.2: Economic activity rates as a proportion of all usual residents aged 16-74
Source: 2011 Census
Table 14-13: Economic activity by social group

<table>
<thead>
<tr>
<th>Social Group</th>
<th>Economic Activity Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>West of England</td>
</tr>
<tr>
<td>Total population</td>
<td>65%</td>
</tr>
<tr>
<td>White ethnic group</td>
<td>65%</td>
</tr>
<tr>
<td>Mixed/multiple ethnic group</td>
<td>66%</td>
</tr>
<tr>
<td>Asian/Asian British</td>
<td>62%</td>
</tr>
<tr>
<td>Black/African/Caribbean/Black British</td>
<td>64%</td>
</tr>
<tr>
<td>Other ethnic group</td>
<td>59%</td>
</tr>
<tr>
<td>Disabled – day-to-day activities limited to some extent</td>
<td>24%</td>
</tr>
</tbody>
</table>

*NB: the economic activity rates outlined in Table 14-13 cover the entire population aged 16 plus, rather than just 16-74 population as per the rates outlined in Figure 14-2 above.

Source: 2011 Census

14.4.17 Unemployment rates are also particularly low in Portishead, Pill and across the West of England in general. At 2.4% and 2.8%, the unemployment rates in Portishead and Pill are 2% lower than the national average. At the same time, youth and long-term unemployment is also significantly lower than the national average in Portishead especially, at 22% and 32% against 27% and 37% respectively (2011 Census). Unemployment rates are also lower in the wider study area relative to across England as a whole (Figure 14-3 below). Furthermore, unemployment affecting vulnerable groups including youth and the long-term unemployment is less severe in the wider study area.

14.4.18 Despite these positive trends in comparison to the national average, there is a continued need to provide employment opportunities for residents looking for work.

*Figure 14-3: Unemployment rate as a proportion of all usual residents aged 16-74
Source: 2011 Census*
In addition to geographical variances across the West of England, patterns of unemployment vary across social groups too. For example, all ethnic minority groups have higher unemployment rates than the local average (Table 14-14). The unemployment rate for disabled residents is low; however, this may result from the low levels of economic activity for disabled residents, as highlighted in Table 14-13.

Table 14-14: Unemployment rate by social group

<table>
<thead>
<tr>
<th>Social Group</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>West of England</td>
</tr>
<tr>
<td>Total population</td>
<td>4%</td>
</tr>
<tr>
<td>White ethnic group</td>
<td>4%</td>
</tr>
<tr>
<td>Mixed/multiple ethnic group</td>
<td>9%</td>
</tr>
<tr>
<td>Asian/Asian British</td>
<td>5%</td>
</tr>
<tr>
<td>Black/African/Caribbean/Black British</td>
<td>12%</td>
</tr>
<tr>
<td>Other ethnic group</td>
<td>8%</td>
</tr>
<tr>
<td>Disabled – day-to-day activities limited to some extent</td>
<td>2%</td>
</tr>
</tbody>
</table>

*NB: the economic activity rates outlined in the table above cover total population aged 16 plus, rather than just 16-74 population as per the rates outlined in Figure 14-3 above.

Source: 2011 Census

Unemployment Benefit Claimants

These geographical trends in unemployment are further confirmed by claimant count rate data (Figure 14-4), which measures the proportion of the resident working age population claiming job-seekers allowance (“JSA”). The proportion of JSA claimants is lower in Portishead and Pill than for sub-regional or national averages. Following the financial crisis of 2008/9, the JSA claimant rate peaked across all geographies. Although, the rate has subsequently declined to pre-recession levels in Portishead, Pill and across the West of England, the spike in Pill persisted for longer than across other geographies, with the claimant count rate reaching its maximum extent in 2012. This could be indicative of a lack of economic resilience in Pill to deal with economic shocks, thus highlighting the ongoing need to improve employment opportunities for residents in the town.
Summary

14.4.21 The labour market in the wider study area can be characterised by the following key findings:

- High levels of labour market participation, measured in terms of economic activity, necessitating well-developed, multi-modal transport networks to facilitate access to jobs;
- Generally low levels of unemployment, including some vulnerable groups (with the town of Pill being the exception for the youth and long-term unemployed); and
- Low levels of JSA claimants, albeit the proportion of claimants has risen disproportionately in Pill since 2005.

14.4.22 Given these findings, it is understandable that much of the West of England is subject to relatively low levels of employment deprivation, particularly around Portishead and Pill. However, as shown in Figure 14-5 below, some extreme pockets of deprivation persist elsewhere across the West of England.
Socio-Economic Classification

Skills and Education

14.4.23 Portishead and Pill have a particularly high proportion of its population with NVQ4+ qualifications (35%-36%), significantly above the equivalent proportion for England as a whole (27%) (Table 14-15). These towns are also home to a lower proportion of residents with no qualifications (15% in Portishead and 18% in Pill versus 23% nationally).

14.4.24 The 2011 Census also reveals that residents in some parts of the wider study area have achieved high levels of educational attainment. Similarly, a low proportion of residents in the West of England have no formal qualification relative to the national average (19% for West of England versus 23% nationally). This implies that the working age population of the study areas is generally well-skilled, an assertion that is reflected by the skills, education and training deprivation indicator illustrated in Figure 14-6 below.

14.4.25 That said, Figure 14-6 also demonstrates that there are some locations within the West of England where the skills base is relatively weak.

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Qualifications</td>
<td>18.0%</td>
<td>14.5%</td>
<td>19.2%</td>
<td>22.5%</td>
</tr>
<tr>
<td>NVQ Level 4+ Qualifications</td>
<td>35.3%</td>
<td>36.2%</td>
<td>30.6%</td>
<td>27.4%</td>
</tr>
</tbody>
</table>

Source: 2011 Census
Occupational Structure

14.4.26 Skills and qualifications are often reflected in occupational structure and average earnings. This general trend holds for Pill and Portishead, as well as the wider study area, given that a well-educated population is over-represented in higher level occupations (e.g. managers, directors and senior officials, professional occupations and associate, professional and technical occupations). More than half of Portishead’s residents and 50% of Pill’s residents are concentrated in occupations at the top-end of the occupational structure, in high-value occupations (Table 14-16). Further, only 23% of residents in Portishead and 24% in Pill occupy positions at the low-value end of the occupational structure spectrum compared to 29% nationwide (where the low end of the spectrum comprises caring, leisure and other service occupations, sales and customer service occupations and elementary occupations).

14.4.27 At a sub-regional level, 43% per cent of residents across the West of England are concentrated in higher level occupations, compared to only 41% of the population nationally. Similarly, West of England residents are generally under-represented in lower level occupations compared to nationally. These trends are less pronounced for the West of England compared to Portishead and Pill though.
Table 14-16: Occupational structure

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Managers, directors and senior officials</td>
<td>14.0%</td>
<td>13.3%</td>
<td>10.2%</td>
<td>10.9%</td>
</tr>
<tr>
<td>2. Professional occupations</td>
<td>21.1%</td>
<td>21.6%</td>
<td>20.2%</td>
<td>17.5%</td>
</tr>
<tr>
<td>3. Associate professional and technical occupations</td>
<td>13.5%</td>
<td>17.0%</td>
<td>13.0%</td>
<td>12.8%</td>
</tr>
<tr>
<td>4. Administrative and secretarial occupations</td>
<td>11.4%</td>
<td>12.3%</td>
<td>11.9%</td>
<td>11.5%</td>
</tr>
<tr>
<td>5. Skilled trades occupations</td>
<td>11.1%</td>
<td>8.5%</td>
<td>10.8%</td>
<td>11.4%</td>
</tr>
<tr>
<td>6. Caring, leisure and other service occupations</td>
<td>8.2%</td>
<td>7.4%</td>
<td>8.8%</td>
<td>9.3%</td>
</tr>
<tr>
<td>7. Sales and customer service occupations</td>
<td>5.8%</td>
<td>8.5%</td>
<td>8.7%</td>
<td>8.4%</td>
</tr>
<tr>
<td>8. Process plant and machine operatives</td>
<td>5.1%</td>
<td>4.5%</td>
<td>5.9%</td>
<td>7.2%</td>
</tr>
<tr>
<td>9. Elementary occupations</td>
<td>9.8%</td>
<td>7.0%</td>
<td>10.5%</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

Source: 2011 Census

Income Earnings

14.4.28 The ASHE (2015) provides data on median gross weekly pay at local authority scale geographies and above only. It is not available at smaller scale geographies such as ward level of LSOA level. The most recent data suggest that residents in the West of England earn similar gross weekly wages to the national average (around £530) (Table 14-17). However, with gross weekly earnings of more than £550, residents in North Somerset local authority earn significantly above the national average. This reflects the higher qualifications and occupational structure characteristic of some of the key towns in North Somerset (e.g. Portishead) and is illustrated in Figure 14-7 below.

14.4.29 It should also be noted that wages for residents in North Somerset are much higher than wages for workers who are employed in the local authority area (£552 and £501 respectively). The implication of this finding is that a significant proportion of North Somerset residents must be commuting out of the district for work, possibly to higher income employment located in South Gloucestershire (average gross weekly workplace earnings of £551) or Bristol (£529).

Table 14-17: Gross Weekly Earnings (£) Comparison

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Bath and North East Somerset</th>
<th>Bristol</th>
<th>North Somerset</th>
<th>South Gloucestershire</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace (Median)</td>
<td>490.5</td>
<td>528.5</td>
<td>501.0</td>
<td>551.4</td>
<td>517.9</td>
<td>532.4</td>
</tr>
<tr>
<td>Resident (Median)</td>
<td>522.3</td>
<td>508.0</td>
<td>551.8</td>
<td>540.5</td>
<td>530.7</td>
<td>532.6</td>
</tr>
</tbody>
</table>

Source: ASHE, 2015

14.4.30 The relative wealth of residents in North Somerset is reflected by patterns of income deprivation across the West of England (Figure 14-7). Analysis of neighbourhoods in Portishead reveals that only one area of the town features in the most income-deprived 50% of neighbourhoods nationally; more than 80% feature in the least income deprived...
30%. At a wider level, 30% of neighbourhoods in the West of England feature in the 20% least income-deprived areas whilst only 11% feature in the 20% most income-deprived neighbourhoods nationally. Combined with the ASHE data outlined above, these trends suggest that vulnerable, low income groups are not commonly found in the wider study area for MetroWest Phase 1.

14.4.31 However, where pockets of income deprivation do exist (for example around Bedminster, Windmill Hill and Lawrence Hill in particular).

![Image of income deprivation map]

**Figure 14-7: Income deprivation**

*Source: IMD, 2015*

**Social Grade**

14.4.32 The socio-economic classification analyses above (covering skills, occupational status, and income/wages) are consolidated into one socio-economic indicator via the approximated social grade. This indicator considers an individual’s occupation, employment status, qualification status, tenure and whether they are working full-time, part-time or not working. Based on these factors, households are classified into one of the following categories of social grading:

- AB: Higher and intermediate, managerial/administrative/professional occupations;
- C1: Supervisory, clerical and junior managerial/administrative/professional occupations;
- C2: Skilled manual occupations; and
- DE: Semi-skilled and unskilled manual occupations, unemployed and lowest grade occupations.
Consolidation of these trends results in a high proportion of Portishead residents featuring in the top levels of the approximated social grading system (i.e. A/B/C1) (2011 Census).

Based on 2011 Census data, the towns of Portishead and Pill, as well as the West of England in general, is home to a much higher proportion of residents in the top socio-economic grades (i.e. A/B and C1) relative to the national average. As a result, residents in these towns and the wider study area are far less likely to be concentrated in the bottom socio-economic grades (i.e. C2 and D/E) (Table 14-18).

### Table 14-18: Approximated social grade

<table>
<thead>
<tr>
<th>Geography</th>
<th>AB</th>
<th>C1</th>
<th>C2</th>
<th>DE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pill</td>
<td>33%</td>
<td>29%</td>
<td>21%</td>
<td>18%</td>
</tr>
<tr>
<td>Portishead</td>
<td>34%</td>
<td>35%</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>West of England</td>
<td>26%</td>
<td>32%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>England</td>
<td>23%</td>
<td>31%</td>
<td>21%</td>
<td>25%</td>
</tr>
</tbody>
</table>

*Source: Census, 2011*

### Summary

14.4.35 The review of the socio-economic classification indicators for the towns of Portishead and Pill, as well as the West of England in general highlights a number of key characteristics of the local population that are pertinent to the delivery of MetroWest Phase 1, including:

- A skilled population with considerable educational attainment levels;
- Well-developed occupational structure skewed towards higher-end occupations;
- Higher residential than workplace wages, implying a significant level of out-commuting from the wider study area; and
- High proportion of residents at the upper-end of the social grading system.

### Employment Profile

14.4.36 There are two elements to analysing the employment profile of the immediate and wider study areas. Firstly, the distribution of residents across economic sectors provides an indication of the types of jobs people are employed in, irrespective of where their place of employment is located. Secondly, the sectorial profile of employees gives an insight into the types of businesses that are located in Portishead, Pill and the West of England as a whole, irrespective of where the employees reside. This analysis allows any discrepancies between the types of jobs available in the area and the types of jobs sought by residents to be highlighted.

14.4.37 The residential employment profile for Portishead and Pill shows a high proportion of residents work in the banking, finance and insurance sector (2011 Census). Combined with the transport and communications sector, circa one-third of residents are employed in these typically high-value industries. This implies a well-developed labour force in both towns.

14.4.38 The sectorial profile of residents in the wider study area is broadly similar to the national average (Table 14-19). However, the 2011 Census data suggest that the population of the wider study area is over-represented in high-value industries such as banking, finance and insurance. Similarly, fewer residents are employed in traditionally lower-value industries such as distribution, hotels and restaurants and other services. This evidence suggests that
the wider study area, like Portishead and Pill, is home to a strong and buoyant labour force.

14.4.39 The sector profile for the workforce employed in the wider study area is based on BRES (2015). The data, presented in Table 14-20, indicate that the sectorial profile for the workforce is distinct from the residential profile. For example, there is a disproportionately high level of public administration employment in Portishead. This sector has experienced a period of significant contraction following the financial crisis of 2008/9. As such, a higher proportion of the context area’s workforce is located in industries that remain at risk of job losses, relative to the national average. At the same time, the proportion of the workforce employed in high-value industries (i.e. transport and communications and banking, finance and insurance) is lower for Portishead than for England. This is the opposite of the trend for the residential employment profile, implying a high degree of out-commuting from the area as suitable jobs are not available for residents locally.

14.4.40 In Pill and across the West of England in general, higher levels of employment in the banking, finance and insurance sector are noticeable. However, it should be noted that the vast majority of such ‘business services’ jobs in Pill in particular, are administrative or support roles. Further, in the West of England the manufacturing and construction industries, which typically generate high levels of economic output are under-represented in the workplace employment profile compared to the residential employment profile.

14.4.41 Given the high proportion of business services employment in the West of England and Pill in particular, a labour market imbalance may exist in these locations. This could result in disparity between workforce skills and employment opportunities, especially for those residents with a skillset more suited to blue collar employment.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Agriculture and fishing (SIC A)</td>
<td>0.6%</td>
<td>0.1%</td>
<td>0.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>2: Energy and water (SIC B,D,E)</td>
<td>1.4%</td>
<td>1.3%</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>3: Manufacturing (SIC C)</td>
<td>6.5%</td>
<td>8.2%</td>
<td>7.7%</td>
<td>8.8%</td>
</tr>
<tr>
<td>4: Construction (SIC F)</td>
<td>8.1%</td>
<td>7.1%</td>
<td>7.5%</td>
<td>7.7%</td>
</tr>
<tr>
<td>5: Distribution, hotels and restaurants (SIC G,J)</td>
<td>18.7%</td>
<td>19.6%</td>
<td>20.9%</td>
<td>21.5%</td>
</tr>
<tr>
<td>6: Transport and communications (SIC H,J)</td>
<td>10.5%</td>
<td>9.4%</td>
<td>9.1%</td>
<td>9.1%</td>
</tr>
<tr>
<td>7: Banking, finance and insurance, etc. (SIC K,L,M,N)</td>
<td>20.3%</td>
<td>20.9%</td>
<td>18.9%</td>
<td>17.5%</td>
</tr>
<tr>
<td>8: Public administration, education &amp; health (SIC O,P,Q)</td>
<td>29.6%</td>
<td>29.1%</td>
<td>29.7%</td>
<td>28.2%</td>
</tr>
<tr>
<td>9: Other services (SIC R,S,T,U)</td>
<td>4.3%</td>
<td>4.2%</td>
<td>4.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

*Source: Census, 2011*
### Table 14-20: Workforce employment profile

<table>
<thead>
<tr>
<th>Industry</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Agriculture and fishing (SIC A)</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>1.3%</td>
</tr>
<tr>
<td>2: Energy and water (SIC B,D,E)</td>
<td>0.0%</td>
<td>0.1%</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>3: Manufacturing (SIC C)</td>
<td>3.7%</td>
<td>3.9%</td>
<td>6.3%</td>
<td>8.0%</td>
</tr>
<tr>
<td>4: Construction (SIC F)</td>
<td>1.8%</td>
<td>3.7%</td>
<td>4.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>5: Distribution, hotels and restaurants (SIC G,I)</td>
<td>9.7%</td>
<td>25.9%</td>
<td>22.2%</td>
<td>22.8%</td>
</tr>
<tr>
<td>6: Transport and communications (SIC H,J)</td>
<td>32.9%</td>
<td>4.1%</td>
<td>9.2%</td>
<td>9.0%</td>
</tr>
<tr>
<td>7: Banking, finance and insurance, etc. (SIC K,L,M,N)</td>
<td>36.2%</td>
<td>22.1%</td>
<td>25.4%</td>
<td>23.2%</td>
</tr>
<tr>
<td>8: Public administration, education &amp; health (SIC O,P,Q)</td>
<td>12.9%</td>
<td>35.1%</td>
<td>27.0%</td>
<td>25.5%</td>
</tr>
<tr>
<td>9: Other services (SIC R,S,T,U)</td>
<td>2.7%</td>
<td>4.9%</td>
<td>3.7%</td>
<td>4.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

*Source: BRES, 2015*

14.4.42 Station House at Pill currently accommodates two businesses: JNC Consulting and Cambridge Weight Plan Place. JNC Consulting is listed as an architectural firm specialising in building consultancy. Cambridge Weight Plan Place is a provider of health/lifestyle advice and products. Given the relatively small size of the commercial premises at Station House and the nature of the businesses, it is not believed that the businesses support a high level of employment. More detail on the businesses supported at Station House will be provided in the ES.

14.4.43 Going forward, the West of England LEP’s Strategic Economic Plan outlines the ambition to develop the sub-regional economy by prioritising growth in the following sectors: Advanced Engineering & Aerospace, Professional Services, Creative and Digital, High Tech and Low Carbon. These key growth sectors will be focussed on the Enterprise Zone and Enterprise Areas earmarked within the Strategic Economic Plan, and broadly fit within the Manufacturing, Energy and Water and Banking, Finance and Insurance broad sectors listed in Tables 14-19 and 14-20.

### Deprivation

14.4.44 Deprivation is typically measured across a range of dimensions, including employment, education, skills and training and income. The various dimensions are combined and consolidated to create an aggregate measure of deprivation, which represents total deprivation in an area. The extent of aggregate deprivation across the wider study area is illustrated in Figure 14-8 below, which suggests that outside of inner-city Bristol and areas in Weston-super-Mare, the West of England does not suffer from extreme deprivation.

14.4.45 The towns of Portishead, Pill and their surrounding areas appear to be relatively affluent and free from significant disadvantage. In fact, in Portishead and Pill, more than 50% of

---

2 Note that in the case of the workplace employment profile, Pill refers only to Pill Ward and not Pill and Easton-in-Gordano Wards combined, due to data availability.
households are not deprived in terms of any of the dimensions of deprivation, meaning aggregate deprivation in these towns is low.

14.4.46 The relatively low levels of acute deprivation across the wider study area are also reflected in the findings of the 2011 Census, which classifies household deprivation according to the number of dimensions of deprivation each household suffers from. The Census data indicate that fewer homes suffer from multiple dimensions of deprivation in the West of England, relative to England as a whole (Table 14-21). This emphasises the relatively prosperous socio-economic position of the MetroWest Phase 1 study area.

Table 14-21: Household aggregate deprivation

<table>
<thead>
<tr>
<th>Household Deprivation</th>
<th>Pill</th>
<th>Portishead</th>
<th>West of England</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household is not deprived in any dimension</td>
<td>50%</td>
<td>56%</td>
<td>46%</td>
<td>43%</td>
</tr>
<tr>
<td>Household is deprived in 1 dimension</td>
<td>33%</td>
<td>30%</td>
<td>32%</td>
<td>33%</td>
</tr>
<tr>
<td>Household is deprived in 2 dimensions</td>
<td>14%</td>
<td>12%</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>Household is deprived in 3 dimensions</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Household is deprived in 4 dimensions</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Census, 2011

Figure 14-8: Aggregate deprivation

Source: IMD, 2015
Summary and Conclusions

14.4.47 The above section outlines the current socio-economic profile for MetroWest Phase 1’s immediate and wider study areas, defined as the towns of Portishead and Pill and the West of England as a whole respectively. The socio-economic profile of the study area at present and in the future is framed within its economic and planning policy context. The policy documents portray the context area as a relatively prosperous, open economy with high levels of out-commuting within the sub-region and little evidence of self-containment within individual towns. At the same time, a higher level of containment is reported at sub-regional level.

14.4.48 Policy documents at the national and local level also support the drive towards sustainable economic growth and highlight the role that investment in transport infrastructure can play in achieving economic development. The two themes of transport and economy are related in the sense that improving transport provision can act as a driver for economic growth by increasing connectivity and accessibility to employment markets for businesses and employment opportunities for workers. Transport infrastructure can also make locations more attractive for inward investment and business start-up.

14.4.49 The socio-economic analysis and consultation with NSDC has identified a number of vulnerable or disadvantaged groups in the context area. These include: disabled, ethnic minorities, young people and elderly, low income groups. However, the analysis suggests that these groups tend to form a smaller than average proportion of the local population in the study areas. The exception is Pill, which is home to an above average proportion of elderly and disabled residents.

14.4.50 Trends for skills and qualifications, social grading, wages and occupational structure are more mixed. The general trend for Portishead, Pill and the West of England as a whole are positive, resulting in high levels of employment in high-value industries (including financial and business services) where residents are employed in higher end occupations (including senior and managerial professions). This is reflected in the absence of considerable levels of aggregate deprivation in the towns and across the wider context area in general.

14.5 Mitigation Measures Adopted as Part of the DCO Scheme

14.5.1 A number of measures have been included as part of the project design in order to minimise certain environmental effects. This includes:

- careful designing of the project to ensure key receptors are avoided where possible;
- construction adopting best practices techniques, which will be set out in Code of Construction Practice ("CoCP") – this document is still being finalised and will be submitted with the DCO application; and
- compliance with regulatory and legislative regimes as required by law.

14.5.2 The ES will fully set out and detail those embedded mitigation measures within each of the topic chapters.

14.6 Assessment of Effects

Construction Phase

14.6.1 MetroWest Phase 1 and the Portishead Branch Line DCO Scheme are expected to result in positive socio-economic effects during the construction phase (see Table 14-22). Note that
there are some temporary road closures and traffic management being implemented as part of the scheme [see Chapter 16 Transport, Access and Non-Motorised Users for detailed consideration]). More detail on the identification of receptors, the source-pathway-receptor framework and discussion around significance of effects is contained for each construction phase impact in the paragraphs below.

Direct Impacts

14.6.2 **Source-Pathway-Receptor-Effect Summary:** The source activity necessary to implement MetroWest Phase 1 will be construction works. The impact or pathway through which this activity may affect socio-economic conditions in the local and wider study areas is via the creation of a large number of temporary construction jobs. This will impact on the local labour market receptor in the study areas. In turn, the consequence or effect of this impact on the local labour market will be reduced unemployment and increased economic activity for residents.

14.6.3 **Detailed Analysis:** The West of England LEP’s *Impact Guidance Note on Infrastructure Projects* (2015) provides benchmarks for estimating construction stage employment creation. The Note suggests that £90,000 (2014 prices) of construction expenditure can support one full-time equivalent (“FTE”) employee in the construction industry. The scheme could result in creation of 750 FTE jobs during the construction stage.

14.6.4 The Note also indicates that investment during the preparatory and construction stages of an infrastructure project can result in uplift in GVA. The scale of uplift is estimated at around 40% of construction turnover and 50% of non-construction (i.e. preparation) turnover. On this basis, MetroWest could generate direct GVA uplift of £32.8m.

14.6.5 Section 14.4 outlines the generally positive trends in the West of England and Portishead in particular, relating to unemployment, economic activity and other key socio-economic indicators. Further, it is evident from the sectoral profiles of employment that the construction industry is performing broadly in line with national trends based on both the residential and workplace analysis. Further, the review of regulatory/policy documents reveals the high national importance of the construction sector as a driver for economic growth and development. That said, the specialised nature of the construction industry means that it is not always possible to guarantee jobs will be sourced from the local labour market. Further, investment in the preparatory and construction stages will also facilitate considerable GVA uplift in the construction stage. Taking these various issues into consideration, the sensitivity of the construction-related local labour market as a socio-economic receptor can described as Medium.

14.6.6 The estimate of 750 FTE construction jobs represents 87% and 2% of residents in construction jobs in Portishead and the West of England as a whole respectively. The estimate is also more than five times larger than the total number of residents in Pill currently employed in construction. This implies that labour demand in the construction stage would need to be sought from the wider West of England area as well as in Portishead and Pill. Nevertheless, this level of employment creation represents an important increase in construction-related jobs, and would enhance the construction sector as a key employer across the local and wider study areas. Therefore, despite the short-term, temporary nature of construction jobs, the magnitude of the impact of construction of the DCO Scheme can be described as Medium.

14.6.7 Combining the Medium sensitivity of the local labour market and the Medium magnitude of the impact of construction, the significance of the availability of new construction-related employment opportunities and subsequent effects on the local labour market can be described as **Moderate Beneficial**.
Indirect Impacts

14.6.8 **Source-Pathway-Receptor-Effect Summary:** Construction-related activity associated with delivering MetroWest Phase 1 may be the source of indirect impacts during this stage as well. For example, expenditure by firms undertaking the construction works will lead to increased activity in the construction industry's supply chain, leading to additional employment creation and GVA uplift. Further, increased expenditure by employees directly employed in undertaking the construction works could lead to increased turnover for local firms, which again could result in additional employment creation and GVA uplift.

14.6.9 **Detailed Analysis:** The West of England’s *Guidance Note on Infrastructure Projects* (2015) states that the multiplier factor for indirect output (GVA) and employment is 1.85. This means that for each unit of direct employment creation or GVA uplift, the indirect impact is valued at 0.85. This relationship exists as a result of increased expenditure by businesses in their supply chain (leading to increased employment demand and output within the supply chain) and increased expenditure by employees on consumer goods and services (leading to increased employment demand and output within the consumer industry).

Within this context, direct employment creation of 750 jobs could generate indirect employment creation of 638 jobs, and direct GVA uplift of £32.8m could translate to £27.9m of indirect GVA.

The supply chain and consumer services business receptors that will benefit from the boost could be local, in light of the need to establish a local supply chain to reduce transportation costs. Similarly, expenditure impacts are also likely to be local, given that construction stage employees are likely to be local and consume goods and services from nearby businesses. Therefore, the sensitivity of local business receptors can be described as Medium.

The magnitude of the impact of increased expenditure is also likely to be Medium. This judgement is based on a combination of the quantity of new indirect jobs created as a result of increased expenditure and the subsequent considerable uplift in GVA locally, tempered by the fact that the impacts will only persist over the short-term.

Combining the Medium sensitivity of local businesses and the Medium magnitude of expenditure and GVA uplift anticipated from indirect employment generated by the construction activity, the significance of indirect impacts on local businesses can be described as **Moderate Beneficial.**

Operation Phase

14.6.14 MetroWest Phase 1 and the Portishead Branch Line DCO Scheme are expected to result in largely positive socio-economic effects during the operational phase, as explained below (see Table 14.22). More detail on the identification of receptors, the source-pathway-receptor framework and discussion around significance of effects is contained for each operational phase impact in the paragraphs below.

14.6.15 Note that this analysis is largely based on the existing Preliminary Business Case (“PBC”) for MetroWest Phase 1 (September 2014). Therefore the PBC considers the wider MetroWest project, rather than the DCO Scheme alone. At this stage, it is not possible to separate out the impacts of the DCO Scheme from the wider MetroWest Phase 1 project. Further, this business case is currently being updated to reflect the revised DCO Scheme, which includes a reduced frequency for services. Reduced frequency for services could impact on the scale of employment required to operate the service. However, these changes have not been quantified yet. As such, any changes to receptors and/or effects arising from the updated business case will be assessed and presented as part of the
Environmental Statement. Similarly, the revised business case will also allow the specific impacts of the DCO Scheme, separated out from the overall MetroWest Phase 1 project, to be reported.

**Direct (Operational) Employment Impacts**

**14.6.16 Source-Pathway-Receptor-Effect Summary:** Once implemented, the operation and management of MetroWest Phase 1 has the potential to generate operational phase employment related to the functioning of the reopened rail line. Employment creation could be realised through the pathway of new and redeveloped stations at Portishead and Pill respectively. These facilities will necessitate ticket office, passenger welfare support and other staff in cleaning, maintenance and other roles on a day-to-day or regular basis. Although no explicit space has been made available for concessions at this point, there is future potential for some retail employment associated with the provision of concessions at Portishead.

**14.6.17** Within this context, the direct (operational) employment impact at Portishead and Pill Stations is expected to be positive. The requirement for operational stage employment will impact on the local labour market socio-economic receptor, and may have the effect of reducing unemployment and improving labour participation rates in the study areas.

**14.6.18 Detailed Analysis:** The Preliminary Business Case (September 2014) for the MetroWest Phase 1 project\(^3\) states that 24 new train drivers and 24 new train managers would be required to operate the service. Further, it is anticipated that additional employment opportunities would be created by the train operating company and Network Rail to support station and facilities management and infrastructure maintenance respectively. However, it is not possible to quantify the exact number of jobs that would be created for these purposes, although recent analysis of staffing patterns at local rail stations in the West Midlands suggests that between 2 and 25 staff could be required to fill station and facilities management positions alone. Therefore, for the purpose of this assessment, it is assumed that approximately 70 direct jobs would be supported by MetroWest Phase 1.

**14.6.19** Despite the generally positive performance of the local and wider study areas’ labour market, job creation remains a key objective underpinning local as well as national planning policy. Therefore the labour market is considered as a Medium sensitivity receptor.

**14.6.20** As stated, MetroWest Phase 1 will only directly create a small number of full-time equivalent jobs during the operational stage (around 70 in total). This is considered a Low magnitude impact.

**14.6.21** Combining the Medium sensitivity of the local labour market and the Low magnitude net employment impact as a result of MetroWest Phase 1, the significance of the increased availability of employment opportunities and subsequent effects on the local labour market can be described as **Minor Beneficial**.

**Indirect Employment Impacts**

**14.6.22 Source-Pathway-Receptor-Effect Summary:** The DCO Scheme will result in the demolition of Station House at Pill, which currently houses two businesses owned by the same individual. The scheme will therefore result in the closure or relocation of these affected businesses. This could affect a small number of employees currently accommodated at Station House.

\(^3\) MetroWest Phase 1 Preliminary Business Case Report 3 September 2014
14.6.23 However, in light of the positive direct (operational) employment impacts discussed above, the net employment impact at Portishead and Pill Stations is expected to be positive. The requirement for operational stage employment will impact on the local labour market socio-economic receptor, and may have the effect of reducing unemployment and improving labour participation rates in the study areas.

14.6.24 **Detailed Analysis:** The redevelopment of Pill Station will lead to the demolition of an existing commercial property, resulting in the loss or relocation of associated business and employment. However, as outlined in the baseline section, these businesses are believed to support a low number of employees. In addition, given the prevailing commercial vacancy rates in the area (7.5%), it is understood that the affected business could relocate to alternative premises elsewhere in the sub-region, meaning jobs could be safeguarded and retained within the West of England.

14.6.25 For the same reasons outlined above, the labour market is considered as a Medium sensitivity receptor.

14.6.26 Some existing jobs at commercial premises near Pill Station may also be threatened as a result of the DCO Scheme. That said, this threat will be mitigated to some extent through the availability of alternative premises elsewhere in the sub-region, meaning jobs could be safeguarded and retained within the West of England.

14.6.27 In light of the level of employment estimated at Station House currently, potential employment impacts are expected to be low in the context of the local study areas (Portishead and Pill) and negligible in the context of the wider West of England labour market. As a result, the potential for business closure/relocation and subsequent loss of jobs as a result of MetroWest Phase 1 is considered a Low magnitude impact.

14.6.28 Combining the Medium sensitivity of the local labour market and the Low magnitude employment impact as a result of MetroWest Phase 1, the significance of the fewer employment opportunities and subsequent effects on the local labour market can be described as **Minor Adverse**. Further, the net impact on the labour market (taken into account the job creation opportunities unlocked as direct (operational) employment impacts) is expected to be beneficial overall.

**Transport economic outcomes**

14.6.29 **Source-Pathway-Receptor-Effect Summary:** Once implemented, the MetroWest Phase 1 service has the potential to reduce journey times and congestion across the West of England’s transport network. The pathway for this potential impact could relate to modal shift from highway to public transport systems, and will likely affect a range of socio-economic receptors including commuters, businesses and leisure/recreation and retail consumers. The effect of reduced journey times and congestion on these receptors could include widened labour supply and demand catchments leading to higher labour participation and employment rates, improved productivity boosting local economic output and increased business attraction to the local and wider study areas, leading to increased investment and further job creation.

14.6.30 As noted above, the current analysis is based on the existing Preliminary Business Case for MetroWest Phase 1 (September 2014). This business case is currently being updated to reflect the revised Scheme, which includes a reduced frequency for services. Reduced frequency for services could impact on passenger demand, which could in turn affect some key metrics contributing to transport economic efficiency, e.g. journey time savings. However, these changes have not been quantified yet. As such, any significant changes to

---

4 High Street vacancy rate, April 2015 (https://www.bristol.gov.uk/business-support-advice/high-streets)
receptors and/or effects arising from the updated business case will be assessed and presented as part of the Environmental Statement. This update should also allow the specific impacts associated with the DCO scheme to be teased out of the overall impacts associated with MetroWest Phase 1 as a whole.

14.6.31 **Detailed Analysis:** The Preliminary Business Case for MetroWest Phase 1 presents the economic appraisal results for the scheme. The appraisal attempts to monetise the economy impacts on business users and transport providers. In particular, it monetises the time saving and vehicle operating cost benefits associated with MetroWest Phase 1, although it does not attempt to monetise reliability improvements resulting from reduced congestion. Decongestion benefits will be incorporated as part of the Outline Business Case. The net value of travel time saving and vehicle operating cost savings is estimated in the range of £186m to £228m. These values are net present values calculated using Network Rail’s Discounted Cash Flow model over a 60 year appraisal period. The breakdown of the values across various categories of transport users is demonstrated below:

- Commuting - £134m to £158m,
- Business - £17m to £20m,
- Other User Benefits - £35m to 50m.

14.6.32 It should be noted that the majority of journey time savings benefits accrue to rail passengers rather than road users, accounting for around 90% of all commuting benefits. However, around 50% of business benefits accrue to road users.

14.6.33 The journey time savings may be partly attributable to modal shift enabled by the DCO Scheme. The Draft Transport Assessment for the DCO Scheme indicates that by 2029, passenger demand at Portishead and Pill Stations will amount to around 1,200 and 200 respectively. Of these trips, around 650 will use car-based modes to access the stations, and could therefore represent mode shift from private vehicles. This will unlock some highway capacity for other road users and help reduce congestion. This will be particularly noticeable in the morning and evening peak periods when the majority of passenger demand is forecast. Further, GBATS4 outputs reported in the Draft Transport Assessment indicate that by 2036, a small reduction in car journeys of around 640 per day will occur as a result of the DCO Scheme. This means that network wide statistics for delay, queues and travel times will all decline, generating the transport economic benefits reported above.

14.6.34 In addition to benefits accruing to business users and transport providers, the appraisal also monetises wider economy impacts, captured due to agglomeration, output change in perfectly competitive markets and labour supply impacts. The total value of wider impacts is estimated at £52m (over a 60 year appraisal period), with the vast majority of benefits (94%) associated with agglomeration impacts. Combining both the business user and transport provider benefits with the wider impacts results in total economy impacts of between £238m and £280m (over a 60 year appraisal period).

14.6.35 The need to reduce journey times and congestion across the West of England is a recurring theme throughout the planning policy documents. Improvements in these measures of transport economic efficiency are highlighted as important to improving economic performance in the area. As a result, the transport network can be described as a High sensitivity receptor.

---

5 The range is based on Option 5b and Option 6b, as presented in Table 3.5 of the PBC
14.6.36 At between £238m and £280m (over a 60 year appraisal period), the scale of monetised transport economic benefits associated with MetroWest Phase 1 represents a High magnitude impact.

14.6.37 Taken together, the High sensitivity of the transport network as a receptor and the High magnitude impact of reducing journey times and congestion on the transport network combine to create a Major Beneficial significant effect resulting from MetroWest Phase 1.

14.6.38 In terms of affordability, the MetroWest Phase 1 Preliminary Business Case suggests that the likely fare structure adopted for the DCO Scheme will have a net minor beneficial impact for residents. This is because although rail fares are typically higher than bus fares, rail trips tend to be quicker. Therefore, when journey time savings and other ‘real’ value of time savings (e.g. subsequent reduced child care costs) are considered, the fare structure for rail trips is considered reasonable.

Wider Regeneration

14.6.39 The DCO Scheme could lead to wider regeneration throughout Portishead, Pill and the West of England as a whole, via a range of potential routes.

Contribution to Enhancing Baseline Socioeconomic Conditions

14.6.40 **Source-Pathway-Receptor-Effect Summary:** The source activity, i.e. the provision and operation of MetroWest Phase 1, could transform the prevailing socioeconomic profile of the study area established throughout Section 14.4. This could lead to a range of impacts on socio-economic receptors including local residents, firms, the sub-region’s labour market, vulnerable demographic groups and others. The effect of transforming the socioeconomic profile of the study are include economic growth and development, a more equal society, enhanced connectivity and accessibility.

14.6.41 **Detailed Analysis:** With reference to the baseline socioeconomic conditions highlighted in Section 14.4, the scheme could have the following implications for the study area:

- The area has a youthful population, with many people about to enter the labour market. These young people are likely to be economically active and the DCO Scheme could provide a viable mode of transport for future commuters in Portishead. This could persuade young people to reside in Portishead rather than migrate elsewhere, as better employment opportunities are made available through the DCO Scheme (see Section on ‘Enabling and Unlocking of Development Land’ and ‘Other Works for MetroWest Phase 1’). This could help to create a relatively youthful population in the town.

- Commuters, with the scheme providing a viable mode of transport for journeys to work. The rail service could benefit those that are economically active, but are unable to use road based transport to commute for employment. The rail service could enable travel in a mode previously unavailable for commuting in Portishead and Pill. The additional option for commuting could improve some people’s provision of a steady income while providing health benefits if commuting involves a walk to/from the railway station. MetroWest Phase 1 will support commuting patterns by providing an attractive service that is well integrated within a wider multi-modal transport network, making commuting easier and quicker. The scheme will provide an alternative, affordable and convenient transport option that will help reduce these inequalities and reliance on the bus network.

- Vulnerable demographic groups such as the elderly, disabled and some ethnic minorities be amongst the biggest beneficiaries of the increased accessibility and connectivity afforded by the MetroWest Phase 1 proposals. The elderly and disabled
may benefit greatly from increased mobility options presented by MetroWest Phase 1, which will provide enhanced opportunities for travel throughout the West of England. Further, better accessibility to employment opportunities afforded by the DCO Scheme could improve economic activity rates amongst ethnic minority groups in particular.

- Increase public transport mode share in an area with low rates of rail users but higher rates of bus users. This gives a good indication of the potential market for an increase in rail-based passenger transport in these towns if MetroWest Phase 1 is delivered, not least because the DCO Scheme will provide a new route and multi-modal opportunities not offered by the existing public transport network. This would also provide a transport method for commuters who do not own a car, which will improve the economic, social and health inequality in these areas.

- Local labour market could become increasingly fluid, with more opportunities for the unemployed as it improves accessibility to employment opportunities. MetroWest Phase 1 could widen the catchment area in which members of the labour force can access jobs. This would improve access to employment for those unable to travel to work by road. The Scheme has the potential to make employment opportunities more accessible to residents in Pill in particular, thereby improving economic resilience in the area.

- Deprivation, as measured by IMD, implies a generally prosperous study area implying its residents are well positioned to harness the connectivity benefits that the DCO Scheme will deliver. However, IMD also indicates there are some pockets of severe deprivation in the area. As some of these pockets are located in proximity to existing railway lines, the enhanced provision of rail services could alleviate employment deprivation. In particular, the increased accessibility to job opportunities offered by MetroWest Phase 1 could offer a clear benefit to the labour market in the context area. By providing better accessibility to and from these pockets of deprivation, the scheme could open up these communities to inward investment and allowing residents to travel elsewhere in the sub-region. Pockets of income deprivation could be addressed by linking residents in such communities to education and employment destinations.

- The Scheme could help to address this issue by providing better linkages to education and training destinations. At the same time, the DCO Scheme could improve accessibility between Portishead and Pill and major university and higher education institutions across the West of England, further strengthening the well-developed skills base in these towns. In particular, the recent purchase of the vacant Parcel Force site next to Temple Meads station by Bristol University means that a new university campus, alongside associated student housing will be located adjacent to the railway. The scheme will therefore provide a direct rail link between Portishead, Pill, Parson Street and Bedminster to the emerging university hub.

- By contributing to an integrated transport network that enhances accessibility throughout the region, MetroWest Phase 1 could help rationalise the occupational structure by increasing the opportunity for residents to find employment that is commensurate with their occupational status.

- MetroWest Phase 1 would improve the range of options for out-commuting from North Somerset and provide better links to high income employment opportunities at destinations across the West of England.

- MetroWest Phase 1 could ease the process of out-commuting. This is pertinent given the high proportion of banking, finance and insurance workers residing in Portishead
and the fact that the DCO Scheme will provide a direct link into Temple Quarter Enterprise Zone, which is a hub for professional services (including banking, finance and insurance). Conversely, MetroWest could make Portishead more attractive to high-value industries meaning transport and communications and banking, finance and insurance businesses increasingly locate in the town, thereby reducing the need for out-commuting from Portishead.

- MetroWest Phase 1 will provide a direct link between Portishead, Pill and Temple Quarter Enterprise Zone in particular (as well as enhancing connectivity to the other growth areas). Therefore, the DCO Scheme will help boost residents’ employment opportunities in the creative, technology, communications, financial and professional services and software industries that are set to be established in the Enterprise Zone. This could lead to the residential employment profile in Table 14-19 being increasingly skewed towards these high value sectors.

14.6.42 Taken together, the scheme could have far-reaching implications for the socio-economic profile of the immediate and wider study area. For example, the generally positive socio-economic trends for residents in Portishead, Pill and the West of England imply that residents are likely to be employed across a wide catchment area and would therefore benefit from the introduction of new transport networks to options for commuting across the wider region. Further, where pockets of deprivation do exist, residents may benefit from increased accessibility to wider job markets, education facilities and other services offered by MetroWest Phase 1.

14.6.43 In summary, the scheme could transform the study area’s socioeconomic profile, by on the one hand providing a viable alternative mode of transport to private car use for commuters, but on the other hand, providing incentives for investment and business relocation to Portishead and Pill to support self-containment of the economy. This could assist residents in the study area to secure local employment that is commensurate to their relatively high levels of skills, qualifications and social grading, as well as providing an opportunity to rebalance the residential and workforce sectoral profile of employment.

Contribution to Planning Policy

14.6.44 **Source-Pathway-Receptor-Effect Summary:** Delivering the DCO Scheme will assist the West of England in realising some of the strategic economic objectives outlined in local and national planning policy documents. The source activity, i.e. the provision and operation of MetroWest Phase 1, is explicitly recommended within the local planning documents and is therefore strategically aligned to assisting the drive towards achieving local economic aspirations. By aligning with the local and national planning framework, the DCO Scheme will help policy objectives to be realised, leading to a range of impacts on socio-economic receptors including local residents, firms and the sub-region’s labour market. The effect of achieving the policy objectives will include economic growth and development in line with the targets set out in the Core Strategy and elsewhere (see Section 14.2).

14.6.45 **Detailed Analysis:** A key message at the national level of planning policy relates to the integrated relationship between economic performance and transport infrastructure, with transport infrastructure presented as a key enabler of economic development and sustainable development objectives (e.g. National Policy Statement for National Networks, Chapter 2). In particular, investment in transport infrastructure is prioritized as a key method to ensuring sustainable economic growth. Further, local and national policy outlines an obligation to improve accessibility to jobs to benefit employees and employers alike. At the local level, planning policy highlights road congestion and other transport
issues as a key constraint on connectivity in the West of England which restricts economic growth (Joint Spatial Plan, Strategic Priority One). Consequently the suite of local planning policy documents is unequivocal in support of reopening the Portishead line to passenger services and the wider MetroWest Phase 1 in general (e.g. Policy BCS10 within the Bristol Core Strategy), not least due to the ability of the scheme to assist with economic development and improving accessibility in the area.

Enabling and Unlocking of Development Land

14.6.46 **Source-Pathway-Receptor-Effect Summary:** As well as the general, qualitative linkages between transport infrastructure and economic performance that the DCO Scheme could facilitate, the DCO Scheme’s operations could help unlock or accelerate specific development projects in the sub-region. Via the pathway of improving transport links to development parcels and generally enhancing public transport provision, MetroWest Phase 1 could impact on a range of receptors, including land owners, developers, businesses, labour markets and consumer markets. The subsequent effects of enabling development for these receptors are many and varied. For example, land values and development viability could increase for land owners and developers due to enhanced transport linkages. Numerous station and rail investment programmes have resulted in regeneration, as measured by land value uplift and unlocked development land, including:

- Jubilee Line Extension and Docklands Light Railway (Gibbons and Machin, 2005), reported a 9.3% uplift in residential property prices in proximity to and attributable to new rail line;
- DART heavy rail in Dublin (Mayor et al, 2005), identified between 7% and 8% uplift in land values in proximity to new rail stations in the city;
- Heavy rail in West Yorkshire (Blainey and Preston, 2010), reported between 7% and 10% growth in house prices following the opening of new rail stations;
- Manchester Piccadilly (Steer Davies Gleave, 2011), where station investment unlocked development or refurbishment of 670,000 sq ft of office space and more than 500 hotel bedrooms (inward investment totalling £130m);
- Sheffield Station Gateway (Steer Davies Gleave, 2011), reported land value uplift of 68% measured in terms of rateable value changes. It also enabled £74m of inward investment, resulting in development of a Digital Campus in proximity to the station; and
- Croydon Tramlink (TfL, 2002), where evidence suggests that increased land values along the route corridor and increased attractiveness to commercial and residential developers are a by-product of enhanced public transport provision.

14.6.47 Similarly, these transport linkages could make labour supply and labour demand markets more interconnected, thus reducing unemployment, increasing economic activity and increasing the pool of skilled labour within a firm’s catchment area. Firms may also benefit from widened consumer markets which could prompt an expansion of the business base.

14.6.48 **Detailed Analysis:** Within this context, the MetroWest Phase 1 project is considered to be critical infrastructure for helping to unlock a number of strategic developments in the West of England, including Temple Quarter Enterprise Zone as well as Enterprise Areas at Bath City Riverside and Filton Enterprise Area. Around 1,150 net jobs and £110m in GVA uplift are attributable to MetroWest Phase 1 according to the LEP’s Strategic Economic Plan. Further detail is provided in Section 14.7. In addition, the DCO Scheme could help development viability by increasing land prices in Portishead (in line with the case study
evidence outlined above). This would allow the town to realise its development potential and achieve the targeted 2,300 jobs set out in the North Somerset Local Plan.

Increased Accessibility and Connectivity

14.6.49 **Source-Pathway-Receptor-Effects Summary:** As alluded to throughout the wider regeneration section, the source activity of MetroWest Phase 1 will lead to improved connectivity between Portishead, Pill and the rest of the West of England. Increased accessibility across the sub-region is a key potential impact and pathway for the DCO Scheme, and will be characterised by improved connectivity, reduced journey times and congestion. These potential impacts and pathways could influence a range of receptors including developers, businesses, labour markets and investors. The subsequent effects on the listed receptors could include reduced severance in Pill, Portishead and disadvantaged communities along the MetroWest Phase 1 route (e.g. Lawrence Hill), modal shift and increased inward investment and business attractiveness to the sub-region as the West of England’s image improves.

14.6.50 **Detailed Analysis:** The positive ramifications of improved connectivity are many and varied. For instance, the DCO Scheme will provide direct access to employment opportunities available in Portishead, Bristol City Centre and other locations in the West of England. Increased connectivity to key locations of labour demand will allow residents to better access jobs that are more commensurate with their typically high levels of skills and qualifications. This could facilitate an increase in average earnings for residents, which according to Figure 14-7 are considerably lower than regional and national benchmarks for some communities along the route (e.g. Bedminster, Windmill Hill and Lawrence Hill). The scheme could also contribute to more sustainable transport choices by encouraging a greater proportion of commuters from North Somerset and Bristol to use rail services rather than the private car (currently only around 2% of commuters from both locations travel by train).

14.6.51 In addition to expanding the Portishead and Pill resident labour market’s reach by improving connectivity to key employment destinations, the DCO Scheme could also have the seemingly opposite impact of promoting commuting to these local study areas and promoting economic containment. As well as improving accessibility from the local study areas to other economic centres, the DCO Scheme will also make Portishead and Pill more porous to the labour force located elsewhere in the West of England and further afield. This could open up the towns to a wider labour supply, with local businesses able to attract staff from further afield than previously.

14.6.52 Widening the labour supply catchment could improve the attractiveness and reputation of the business environment in both the local and wider study areas, potentially influencing the locational choices for firms in key economic sectors such as the professional services industry. As a result, increased inward investment and business relocation to the West of England may follow as the area is regenerated and becomes a community where people want to live, work and visit. This would increase the number and range of jobs available in the sub-region, which could encourage a greater proportion of local university graduates and other talented workers to take-up employment opportunities in the area. A dual effect may arise: increased commuting to the West of England (i.e. reflecting an opening of the economy) and increased retention of the resident workforce (i.e. containment).

14.6.53 Other transport users are also likely to benefit from the connectivity boost caused by MetroWest Phase 1 too. For example, leisure and recreational users will also benefit from increased access to key destinations in the sub-region facilitated by the DCO Scheme, potentially resulting in increased expenditure in the West of England. An increase in internal tourism within the region (e.g. from Bristol to Portishead) could take place, as well
as attracting additional external tourists through the provision of more seamless connectivity throughout the sub-region.

14.6.54 Further, the DCO Scheme is likely to boost freight transport throughout the sub-region, providing businesses with a faster, more reliable route to factor inputs and output markets. This will be achieved through the partial reinstatement of the down relief line at Bedminster to provide additional capacity for recessing freight trains on the Bristol to Exeter main line.

14.6.55 Combined, these wider economic effects resulting from the DCO Scheme could assist with improving the West of England’s performance in terms of the Index of Multiple Deprivation. Data contained within the Section 14.4 and illustrated in Figure 14-8 demonstrates that although the sub-region as a whole generally performs well against overall deprivation, some pockets of acute deprivation remain. Increased access to jobs and the potential for increased investment by businesses in the West of England could help to address areas of concern. Similarly, much of the West of England outside the major cities and towns are acutely disadvantaged based on the geographical barriers definition of deprivation. The Scheme will directly improve performance against this measure. In particular, and in conjunction with schemes such as electrification of the Great Western Mainline between Bristol Parkway and London, MetroWest Phase 1 will improve journey times between towns like Portishead and Pill and London considerably.

Summary and Significance of Wider Regeneration Effects

14.6.56 In summary, the DCO Scheme could deliver wider regeneration associated with accessibility and connectivity improvements that widen labour demand and supply catchments. These effects would benefit West of England residents and businesses respectively. Improving connectivity could also facilitate business location and expansion in the sub-region, further widening labour supply catchments and increasing the potential for retaining skilled members of the local workforce within the sub-region. These potential impacts are aligned with the aspirations of local and national planning policy.

14.6.57 Wider regeneration and economic growth is a key theme permeating through the planning policy literature. The desire for ongoing job creation is a recurring message as well. On this basis, wider regeneration efforts can be described as a High sensitivity socio-economic receptor.

14.6.58 The magnitude of the impact on wider regeneration resulting from the DCO Scheme can be described as High as well. This relates to the contribution that MetroWest Phase 1 could make in terms of facilitating job creation and land development in Portishead and at a number of key growth areas across the West of England.

14.6.59 Combining the High sensitivity of wider regeneration efforts and the high impact magnitude of delivering the DCO Scheme, the significance of MetroWest Phase 1 to wider regeneration efforts can be described as Major Beneficial.

Decommissioning Phase

14.6.60 For the reasons set out at 14.3.14 – 14.3.19 it is not possible to identify realistic options for decommissioning for assessment and no basis on which to consider that there would be reasonably foreseeable significant environmental impacts on socioeconomics and regeneration resulting from decommissioning.

14.7 Mitigation and Residual Effects

14.7.1 In the absence of any significant adverse socioeconomic effects, no mitigation measures are proposed as part of the PEIR. That said, other mitigation measures are being
considered where adverse (but not significant effects) are identified. Proposals are currently being finalised to assess whether they are feasible to include as part of the project. This will be fully documented as part of the ES and there will be ongoing discussions with key stakeholders to consider this further between now and the submission of the DCO application.

14.7.2 The residual effects are as reported in Section 14.6.

14.8 Cumulative Effects

Other Projects along the Portishead Branch Line

14.8.1 Appendix 18.1 provides a list of major planning applications within 2 km of the DCO Scheme between Portishead and Pill. The range of applications covers major mixed-use developments, a number of residential schemes (including around 190 dwellings targeted at elderly residents), a hotel, food store and non-food retail units. This mix of employment, residential, leisure and retail-led development schemes could all benefit from the provision of MetroWest Phase 1, which will provide enhanced accessibility to these development sites. This will mean that the eventual residents at the housing schemes will have improved access to major centres in the West of England such as Bristol. At the same time, the enhanced accessibility will expand the catchment areas of the leisure and retail developments proposed, as well as allowing employers to source labour from a wider pool of employees from greater distances. The scheme can therefore contribute towards major beneficial effects for other projects along the Portishead Branch Line during the operational phase.

Other Works for MetroWest Phase 1

14.8.2 In addition to the DCO elements of the DCO Scheme, the other works required as part of MetroWest Phase 1 (Bedminster Down Relief Line, Severn Beach/Avonmouth Signalling and Bathampton Turnback) are part of a wider set of major transport initiatives proposed for the West of England sub-region. These are intended to facilitate economic growth and regeneration by boosting accessibility and connectivity to key employment destinations. Indeed, the DCO Scheme is only the first Phase of the wider MetroWest programme which is eventually proposed to extend into South Gloucestershire. The other major transport infrastructure schemes under construction in the West of England are new and improved highway, cycling, pedestrian, rail and Bus Rapid Transit (“BRT”) routes:

- Ashton Vale to Temple Meads BRT (MetroBus route),
- North Fringe to Hengrove Package (new and improved highway links with MetroBus provision),
- South Bristol Link (new highway with MetroBus provision).

14.8.3 The West of England LEP’s Strategic Economic Plan (2014) indicates that combined, the transport package is expected to unlock more than 9,000 net jobs and £570m in GVA uplift. The majority of these jobs are expected to be located at the West of England’s key growth areas, located at:

- Temple Quarter Enterprise Zone,
- Filton Enterprise Area,
- Emerson’s Green/ Enterprise Area,
- Bath City Riverside Enterprise Area,
- J21 Enterprise Area,
- Avonmouth Severnside Enterprise Area,
The MetroWest Phase 1 project routes in close proximity to Temple Quarter Enterprise Zone and South Bristol. The Scheme is therefore expected to play a key role in generating positive economic impacts at these sites. Around 1,150 net jobs and £110m in GVA uplift are attributable to MetroWest Phase 1 according to the LEP’s Strategic Economic Plan. That said, the entire package of transport schemes are key to delivering the accessibility and connectivity enhancements necessary to benefit all of the growth areas, irrespective of specific location.

It should also be noted that MetroWest Phase 1, as part of the wider suite of transport infrastructure schemes, could support or improve development viability at an additional nineteen residential and nineteen employment-led or mixed-use developments proposed in proximity to the DCO Scheme. By supporting this scale of economic outcomes in the West of England, the cumulative impacts of the various transport initiatives will represent a major beneficial effect. No residual negative socio-economic effects are anticipated due to the transport schemes, individually or cumulatively.

Limitations Encountered in Compiling the PEI Report

Much of the analysis around operational phase and transport economic efficiency impacts are predicated on MetroWest Phase 1’s Preliminary Business Case, prepared in September 2014. However, this business case reflects the wider MetroWest Phase 1 Scheme at that point in time. The Scheme is currently being substantially revised, leading to the preparation of an updated business case in 2017. The updated business case could result in different operational phase and transport economic efficiency impacts to those assessed in the PEI Report. Further, the analysis derived from the PBC reflects economic impacts for MetroWest Phase 1 as a whole rather than the DCO scheme in isolation. The updated business case will allow for the specific impacts of the DCO scheme to be separated out from the impacts associated with the wider MetroWest Phase 1 scheme.

Some of the GVA and job creation analysis presented in Section 14.7 are predicated on West of England LEP’s Strategic Economic Plan. This study is consistent with Atkins’ 2012 study GVA Impacts of Major Transport Schemes, which is in the process of being updated and replaced by new analysis underpinned by the methodology outlined in the West of England LEP’s Impact Guidance Note (2015). The implications of this Note have been taken into account with regard to Construction Stage impacts. However, the wider economic impacts arising in the Operational Stage have not been treated in a consistent manner. This is due to a lack of certainty on the nature and scale of wider economic impacts, particularly in light of the emerging DfT Guidance on the treatment of wider economic impacts. Therefore, the wider economic impacts referred to in the Strategic Economic Plan are presented in this chapter, although these may be updated as the Business Case for MetroWest Phase 1 progresses.

It should also be noted that quantification of wider regeneration and cumulative effects reflect the increased accessibility and connectivity enabled by delivery of MetroWest Phase 1 and related transport infrastructure schemes. Unlike other types of investment (e.g. in specific land development or employment land provision), it is not possible to say with certainty that specific development sites and their associated employment and GVA
outputs will definitely come forward and be realised via investment in MetroWest Phase 1. Instead, these impacts are inferred from the increased ability to travel and greater linkages between areas of labour supply and employment destinations that result from the DCO Scheme’s delivery. In summary, the DCO Scheme will primarily facilitate job creation and increased GVA indirectly through increasing accessibility and connectivity rather than by directly generating new jobs and economic output.

14.9.5 A number of mitigation measures are still being considered as part of the environmental impact assessment. As the PEI Report only demonstrates those environmental effects at a certain point in time pre-application, these will be further refined as the Environmental Impact Assessment in the DCO application is finalised.

14.10 Summary

14.10.1 This chapter provides a socio-economic impact assessment of the MetroWest Phase 1 Project, set in the context of a planning policy environment that recognises the important role transport infrastructure can play in driving regeneration and economic growth and development. The planning policy context also acknowledges the strategic importance that MetroWest Phase 1 Project, as part of the wider MetroWest programme, could play in supporting the economy of the West of England sub-region.

14.10.2 The assessment is also framed by the baseline review of prevailing socio-economic conditions along the Portishead Branch Line DCO Scheme as well as across the West of England in general. The review indicates that whilst the West of England is generally an affluent area, there are pockets of severe deprivation centred around Bristol’s inner city and South Bristol, some of which are located in proximity to the DCO Scheme.

14.10.3 In light of the DCO Scheme’s strong alignment with planning policy and the presence of some disadvantaged communities in close proximity to the DCO Scheme’s routing, it is unsurprising that MetroWest Phase 1 is anticipated to result in positive effects on a range of socio-economic receptors. In fact, the assessment demonstrates that the DCO Scheme will result in positive effects for the following receptors: local residents (via their role as commuters, labour market participants, retail and leisure consumers), local businesses (via expanded labour supply and consumer markets), land owners and developers (via increased land values and development viability) and investors (via increased attractiveness to business relocation). In the absence of negative and significant effects, no mitigation measures were incorporated into the DCO Scheme design (beyond those put forward within Chapter 16 Transport, Access and Non-Motorised Users).

14.10.4 Within this context, the key potential residual effects arising from the DCO Scheme are listed below and presented in Table 14-22:

- Moderate beneficial effect of direct job creation and direct GVA uplift in the construction stage,
- Moderate beneficial effect of indirect job creation and indirect GVA uplift for local businesses in the construction stage,
- Minor beneficial effect of direct job creation in the operational stage,
- Major beneficial effect of improved journey time savings in the operational stage,
- Major beneficial effect of wider regeneration during the operational stage, specifically relating to contributions to planning policy, enabling and unlocking of development land, increasing accessibility and connectivity and potential transformation of the study area’s socioeconomic profile.
### Table 14-22: Impacts, Mitigation and Residual Impacts for the DCO Scheme on Socio-economics

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Impact</th>
<th>Receptors</th>
<th>Mitigation</th>
<th>Residual Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Direct Employment | Large number of jobs created via construction of the DCO Scheme; subsequent GVA uplift | Labour market | n/a | • Temporary, positive impact  
Value/Sensitivity: Medium  
• Magnitude: Medium  
• Significance of Effect: Moderate  
• Significant for EIA legislation: Yes (Moderate Beneficial) |
| Indirect Employment | Supply chain and consumer expenditure effects lead to additional job creation and GVA uplift in supply chain and consumer industries. | Local businesses | n/a | • Temporary, positive impact  
Value/Sensitivity: Medium  
• Magnitude: Medium  
• Significance of Effect: Moderate  
• Significant for EIA legislation: Yes (Moderate Beneficial) |
| **Operation activities** | | | | |
| Employment | Small number of direct job creation at station. Possible relocation of existing firms at Ashton Vale Industrial Estate due to revised access. | Labour market | Relocation/compensation package for businesses affected by the DCO Scheme. | • Permanent, positive impact  
Value/Sensitivity: Medium  
• Magnitude: Low  
• Significance of Effect: Minor  
• Significant for EIA legislation: No (Minor Beneficial) |
| New railway service 23 mins Portishead to Bristol Temple Meads | Large journey time savings for road and rail users | The transport network and its users, including commuters, businesses, leisure and recreational consumers | n/a | • Permanent, positive impact  
Value/Sensitivity: High  
• Magnitude: High  
• Significance of Effect: Major  
• Significant for EIA legislation: Yes (Major Beneficial) |
| Wider Regeneration | Strong contribution to local and national planning policy | Local residents, firms, labour markets | n/a | • Permanent, positive impact  
Value/Sensitivity: High  
• Magnitude: High  
• Significance of Effect: Major  
• Significant for EIA legislation: Yes (Major Beneficial) |
| Small role in enabling/unlocking development land | | Land owners, developers, investors | n/a | • Long-term, positive impact  
Value/Sensitivity: High  
• Magnitude: High  
• Significance of Effect: Major  
• Significant for EIA legislation: Yes (Major Beneficial) |
| Large increase in accessibility and connectivity | | Local residents, firms, labour markets, land owners, developers, investors | n/a | • Long-term, positive impact  
Value/Sensitivity: High  
• Magnitude: High  
• Significance of Effect: Major  
• Significant for EIA legislation: Yes (Major Beneficial) |
## Table 14-22: Impacts, Mitigation and Residual Impacts for the DCO Scheme on Socio-economics

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Impact</th>
<th>Receptors</th>
<th>Mitigation</th>
<th>Residual Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformation of prevailing</td>
<td>Local residents, firms, the sub-region’s labour market, vulnerable</td>
<td>n.a</td>
<td>• Long-term, positive impact</td>
<td>• Magnitude: High&lt;br&gt;• Significance of Effect: Major&lt;br&gt;• Significant for EIA legislation: Yes (Major Beneficial)</td>
</tr>
<tr>
<td>socioeconomic conditions</td>
<td>demographic groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value/Sensitivity: High</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14.11 References


Department for Business Innovation and Skills, 2010. Local Growth: Realising Every Place's Potential. HM Government.


Homes and Communities Agency, 2011. Calculating Cost per Job: Best Practice Note. 2nd Edition

Knight Frank, 2015. Logic-Research: South West Logistics and Industrial Commentary


Office for National Statistics, 2010. Measuring the Economic Impact of an Intervention or Investment

Steer Davies Gleave, 2011. The Value of Station Investment: Research on Regenerative Impacts


### 14.12 Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASHE</td>
<td>Annual Survey of Hours and Earnings</td>
</tr>
<tr>
<td>BCC</td>
<td>Bristol City Council</td>
</tr>
<tr>
<td>BIS</td>
<td>Department for Business, Innovation and Skills</td>
</tr>
<tr>
<td>BRES</td>
<td>Business Register and Employment Survey</td>
</tr>
<tr>
<td>BRT</td>
<td>Bus Rapid Transit</td>
</tr>
<tr>
<td>CLG</td>
<td>Department for Communities and Local Government</td>
</tr>
<tr>
<td>CoCP</td>
<td>Code of Construction Practice</td>
</tr>
<tr>
<td>DCO</td>
<td>Development Consent Order</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental impact assessment</td>
</tr>
<tr>
<td>EGRUP</td>
<td>Evaluation Group on Regional and Urban Programmes</td>
</tr>
<tr>
<td>FTE</td>
<td>Full time equivalent</td>
</tr>
<tr>
<td>GVA</td>
<td>Gross Value Added</td>
</tr>
<tr>
<td>IMD</td>
<td>Indices of Multiple Deprivation</td>
</tr>
<tr>
<td>JSA</td>
<td>Job seekers allowance</td>
</tr>
<tr>
<td>LEP</td>
<td>Local Enterprise Partnership</td>
</tr>
<tr>
<td>NOMIS</td>
<td>National Online Manpower Information Systems</td>
</tr>
<tr>
<td>NPPF</td>
<td>National Planning Policy Framework</td>
</tr>
<tr>
<td>NPSNN</td>
<td>National Policy Statement for National Networks</td>
</tr>
<tr>
<td>NSDC</td>
<td>North Somerset Council</td>
</tr>
<tr>
<td>PSP</td>
<td>Principal supply point (for signalling equipment)</td>
</tr>
<tr>
<td>NVQ</td>
<td>National Vocational Qualifications</td>
</tr>
<tr>
<td>PEI</td>
<td>Preliminary environmental information</td>
</tr>
</tbody>
</table>